

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for the contactless ignition of a welding arc, in which high-frequency ignition pulses are applied between the welding electrode and the workpiece to be worked to ionize the gap between the welding electrode and the workpiece, and in which the welding current is connected after the ignition of the welding arc, wherein several pulse packets (44) with presettable frequencies and packet period durations (47), or time periods, are applied, wherein several successive ignition pulses (45) are emitted in a pulse packet (44) and a packet interval (46) is each executed between said pulse packets (44), so that overall energy expenditure during ignition can be minimized even while having a maximum energy in each ignition pulse, and wherein the welding current is connected only after a defined period after application of a first ignition

pulse, so that preionization of the gap occurs between the welding electrode and the workpiece.

Claim 2 (Previously Presented): An ignition method according to claim 1, wherein the ignition pulses (45) emitted in a pulse packet (44) are changed in respect to at least one of their number, frequency and ignition period duration (50).

Claim 3 (Previously Presented): An ignition method according to claim 1 wherein the packet period duration (47) is greater than the duration of the ignition pulses.

Claim 4 (Previously Presented): An ignition method according to claim 1, wherein the ignition pulses (45) within a pulse packet (44) are applied at an ignition period duration (50) of between 25 μ s and 1 ms.

Claim 5 (Previously Presented): An ignition method according to claim 1, wherein the pulse packets (44) are applied at a packet period duration (47) of between 1 ms and 1 s.

Claim 6 (Previously Presented): An ignition method according to claim 1, wherein the welding current is applied for a defined time period following the first ignition pulse (45).

Claim 7 (Previously Presented): An ignition method according to claim 1, wherein the time period (48) of the pulse packets (44) and the number of ignition pulses (45) per pulse packet (44), respectively, are adjusted or generated as a function of the adjusted welding parameters.

Claims 8-11 (Canceled).

Claim 12 (Previously Presented): An ignition method according to claim 4, wherein the ignition pulses (45) within a pulse packet (44) are applied at an ignition period duration (50) of 125 μ s.

Claim 13 (Previously Presented): An ignition method according to claim 5, wherein the pulse packets (44) are applied at a packet period duration (47) of 100 ms.